SoftCare: Building Electronic Commerce Systems With BB^{X®}

By Martyn Armstrong

Electronic Commerce (EC), the process through which business partners exchange information electronically, and Electronic Data Interchange (EDI) the most widely used way to implement Electronic Commerce, have become integral components of the communication between businesses in today's global marketplace. EC and EDI provide tremendous cost and time efficiencies for companies, and have evolved from replacing paper records to dynamically enabling and performing strategic business functions such as just-in-time manufacturing, supply chain management, efficient customer response, and vendor-managed inventory. Common business documents and processes between companies like purchase orders, invoices, and payments can now be totally automated when built into existing applications. This linking of customers and suppliers is changing the way the world does business, and fostering lasting, strong relationship between companies.

The worldwide revenues for EC were estimated by International Data Corporation to be $1.5 billion in 1995, with an expected increase to almost $4.0 billion by 2000, demonstrating an average annual compounded growth rate of approximately 21%. Similarly, the EDI market is expected to be $3.2 billion in revenues in 2001, demonstrating a compounded 24% annual growth rate. Even though the EC and EDI markets represent billions of dollars annually, they are currently limited primarily to larger businesses and their top 25 trading partners representing about 5% of the available market.

The smaller and medium-sized businesses have been precluded from using EC and EDI due to the historical complexity and high cost of setting up the systems. Technology now exists that will allow the thousands of small and medium-sized businesses to utilize EC and EDI systems. However, for these businesses, EC and EDI product solutions must be cost-effective, Internet-based, flexible, functional, and scaleable. They must also utilize a portable underlying code which can be readily upgraded to meet changing customer needs and product technology.

Here at SoftCare Electronic Commerce Inc. we believe our Open|EC products will overcome the industry hurdles for widespread adoption by meeting the requirements for EC and EDI use among small and medium-sized businesses. The Open|EC products are complete and integrated EC and EDI solutions that can also be extended to meet the sophisticated requirements of even larger corporations.

We group our products into three families called the Open|EC Desktop Series, Open|EC Corporate Series and Open|EC Enterprise Series. The functionality varies within each Open|EC series based on business requirements, and may include such applications as email, intelligent e-Forms, security, EDI translation and a library of

communications scripts. As required by the changing needs of our customers, We customize certain of our products, and continue our efforts to develop new products like the Open|EC Web Interface (an Internet EC and EDI solution).

At the core of our products are the EDI Open|EC TradeLink and Open|EC BusinessLink Management systems, running on the Unix platforms supported by BASIS' BBxPROGRESSION/4® or PRO/5®, and Visual PRO/5™ on all Microsoft platforms.

SoftCare has used TAOS: The BBx Developer's Workbench® and the 32-bit BASIS ODBC Driver™ to implement solutions for our products. This document outlines our use of BASIS technologies in Unix, Windows 95 and Windows NT to provide leading-edge EDI and electronic commerce software products.

The Open|EC BusinessLink EDI Management System is our Windows 95 and Windows NT-based EDI Server written in Visual Basic and C using the BASIS ODBC Driver to connect to the BASIS file system. The BASIS ODBC Driver enables application developers to access our EDI data, audit information, customer configurations, etc., from their applications. In addition, a client/server solution is simplified by allowing a client to connect to the server application through the ODBC Driver. Users are able to run our EDI products on a Windows client and access the data store in BusinessLink executing on Windows NT.

Open|EC TradeLink EDI Management System is our Unix- based EDI Server written in TAOS running on BBxPROGRESSION/4 and PRO/5. One obvious benefit of using BBx is portability. Our product runs on all platforms supported by a BBx port without any change in our TAOS source code. This provides a great advantage to us by reducing our expense associated with porting.

Understanding that smooth EDI implementations are directly attributed to the tightness of integration between TradeLink and end- users' applications, we leveraged the BBx technology by developing shrink-wrapped interfaces to existing BBx based applications.

ADD+ON Software Inc. and OSAS from Open Systems Inc. are two BBx based applications with which we have developed packaged EDI interfaces. These interfaces, known as Open|EC ADD+ON and Open|EC OSAS allow us to extract data between these applications and TradeLink providing a truly integrated EDI solution. An integrated EDI solution provides a tremendous benefit to the users by eliminating messy integration development and by streamlining daily EDI operations. Through the data dictionary in TAOS, data tables are centralized between TradeLink and applications, enabling a centralized audit between TradeLink and the application. Furthermore, a document such as a purchase order is seamlessly trackable from the accounting application through to TradeLink. Pertinent and timely data is made available to the user without the worry of tracking into which application the information is stored.

SoftCare has an array of other EC products such as Open|EC Intelliforms, a set of EDI-enabled e-Forms developed for customers

with insufficient resources to implement a full scale EDI Server. Open|EC Mapper is a data mapper allowing users to create conversion programs by simply pointing and clicking with a mouse. Open|EC Message Center is an EDI interchange switch allowing the routing of EDI interchanges between mailboxes.

In summary, SoftCare is able to leverage customers with existing applications, using BASIS technology, to achieve a tightly integrated EC solution that works seamlessly with a business' existing procedures. This truly integrated, high-end, software solution is bringing the incredible power of Electronic Commerce to small and medium-sized businesses.

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